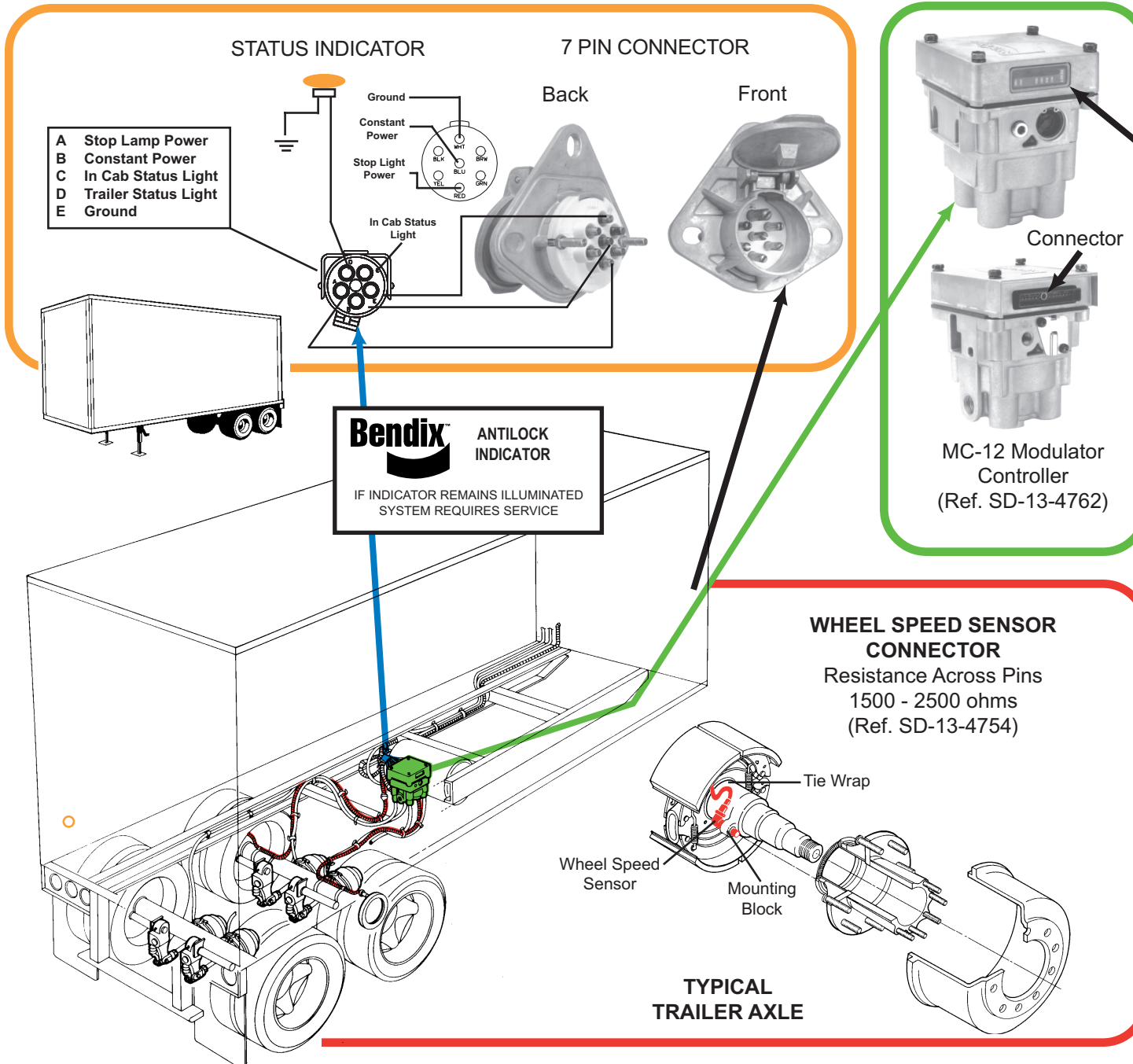
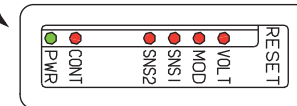


Troubleshooting The Bendix® MC-12 Trailer AntiLock System (Post 2/98)



OPERATIONAL INFORMATION

The EC-12 controller houses the electronics that regulate the antilock system. The EC-12 contains a diagnostic window and a 14 pin connector.



Diagnostic Window

The EC-12 mounts on the M-12 modulator with four bolts and it is internally connected to the solenoids by a four pin connector. Sensors mounted at the wheel end send wheel speed information to the EC-12 through the 14 pin connector. If wheel lock up is impending, the EC-12 commands the solenoids to modulate brake chamber pressure on the axle(s) in which the system is installed. The MC-12 modulator controller receives power and ground from the vehicles electrical system. During start up, trailer antilock immediately runs a self check. The trailer status light flashes once and then goes off. Should a problem occur, the status light comes on and remains on.

TROUBLESHOOTING

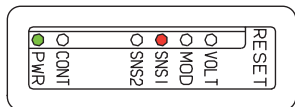
If the status light remains on, inspect the EC-12 for illuminated LEDs. If no status light was installed, the diagnostic LEDs should be checked periodically.

Reset controller with magnet after repair.

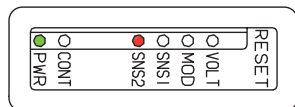
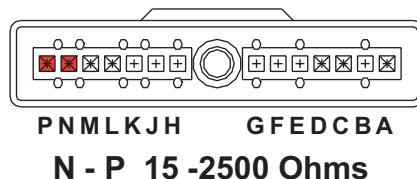


IF THESE LED'S
ARE ILLUMINATED

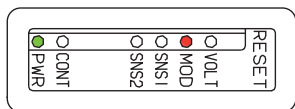
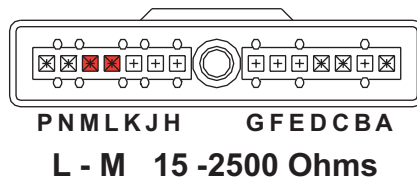
CHECK THE VEHICLE WIRING HARNESS CONNECTOR
FOR THE PROPER RESISTANCE WITH
STOP LAMP POWER OFF



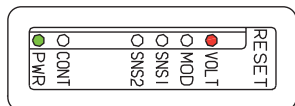
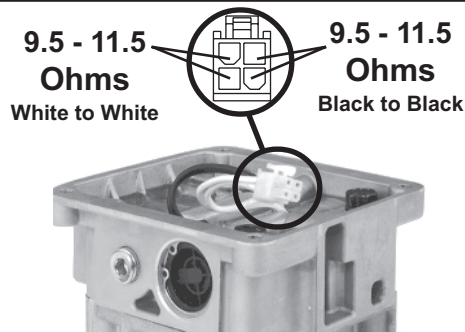
SENSOR 1



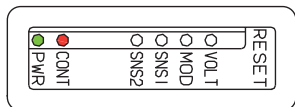
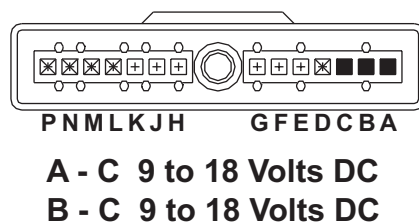
SENSOR 2



MODULATOR



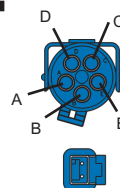
VOLTAGE
w/STOP
LAMP
POWER



ECU
CONTROLLER

Replace Controller

MC-12 Controller Cable Assembly

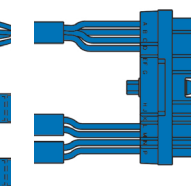
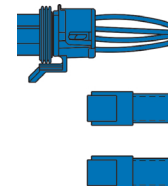


A Stop Lamp Power
B Constant Power
C In Cab Status Lamp
D Trailer Status Lamp
E Ground

Sensor 2 (yellow)
Sensor 2 (yellow)



Sensor 1 (blue)
Sensor 1 (blue)



To Controller

Stop Lamp Power
Constant Power
Ground
Trailer Status Lamp
Cab Status Lamp (optional)
Sensor 2
Sensor 2
Sensor 1
Sensor 1

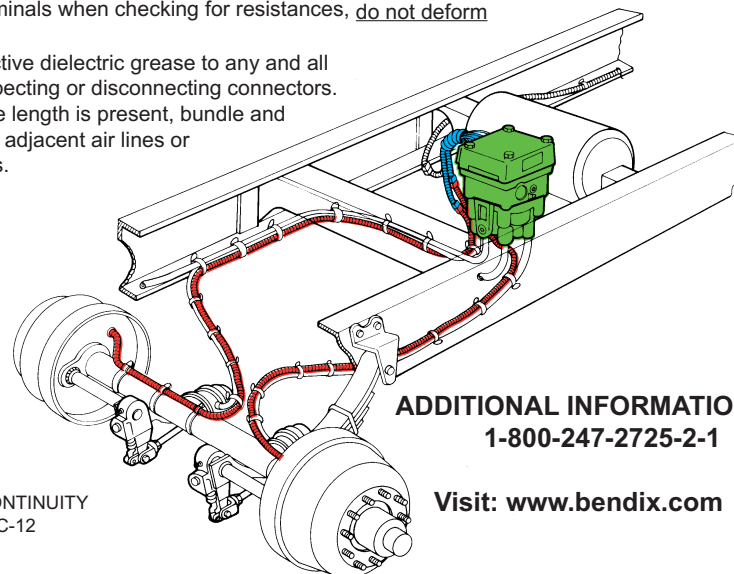
Vehicle wire harness

Most Commonly Encountered Problems That Result In LEDs Being Illuminated.
Repair or Replacement Components As Necessary

- Damaged connectors or wires, caused by dangling or loose wires not properly restrained.
- Power connection not capable of supplying 12 volts at 3 amps because of a poor connection, bad crimp
- Corroded connectors and connections not properly sealed or seated.
- Terminals not completely latched or sealed into connectors; harness connector bolt not tight.
- Improperly spliced connection repair or repair not sealed properly.
- Excessive sensor air gap, sensor bushing tension or excessive bearing end play.
(Gently push sensor against exciter ring, or readjust bearings)
- Non functioning antilock components, sensor, controller, modulator.

Additional Servicing Tips

- Do not pierce wires with probes when troubleshooting harnesses.
- Gently probe terminals when checking for resistances, do not deform contacts
- Apply nonconductive dielectric grease to any and all connectors if inspecting or disconnecting connectors.
- If excessive cable length is present, bundle and tie wrap neatly to adjacent air lines or framing members.



ADDITIONAL INFORMATION:
1-800-247-2725-2-1

Visit: www.bendix.com

ALL CONTACT OF THE 14 PIN CONNECTOR ABOVE SHOULD NOT HAVE ANY CONTINUITY
TO THE GROUND CONTACT "C". CONTACTS "A" & "B" ARE POWER TO THE MC-12